

2015 Annual Drinking Water Quality Report

Southside Water and Sewer Board

Southside Water Works and Sewer Board is very pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the quality of water you have received over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. We want you to understand the efforts we make to maintain and continually improve the water you receive and to protect our water supply.

Southside's water is groundwater drawn from two (2) wells and water purchased from the City of Gadsden. Southside's wells draw from the Fort Payne Chert and the Cambrian and Ordovician Rocks undifferentiated. Each water system must complete a Source Water Assessment Program (SWAP). The SWAP is comprised of four distinct activities: delineation of the source water assessment area, contaminant inventory, susceptibility analysis and public awareness. Southside Water Works and Sewer Board has completed each required component of the source water assessment and the Alabama Department of Environmental Management (ADEM) has approved the plan. The findings of the SWAP are available for your review at the office located at 3001 Highway 77. To provide safe drinking water chlorine is used as a disinfectant.

The Water Works and Sewer Board is pleased to report that our drinking water is safe and meets federal and state requirements. If you have any questions about this report or concerning your water utility, please contact Superintendent of Maintenance Brandon Sewell at 442-8707 between 8:30 a.m. through 4:30 p.m., or e-mail your questions to southwatbs@bellsouth.net. We want our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Monday of each month, at 3:00 p.m., at the Water Works and Sewer Board Office located at 3001 Highway 77.

The Southside Water Works and Sewer Board routinely monitors for elements in your drinking water according to the Federal and State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2015. This table has many abbreviations you might not be familiar with. To help you better understand these abbreviations we've provided the following definitions.

definitions...

- Non-Detects (ND) – laboratory analysis indicates that the constituent is not present.
- Parts per million (ppm) or milligrams per liter (mg/l) – one part per million corresponds to one minute in two years, or a single penny in \$10,000.
- Parts per billion (ppb) or ug/l – micrograms per liter – one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Picocuries per liter (pCi/l) – picocuries per liter is a measure of radioactivity in water.
- Millirems per years (mrem/yr) – measure of radiation absorbed by the body.
- Nephelometric Turbidity Units (NTU) – a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- Maximum Contaminant Level – The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water.
- Maximum Contaminant Level Goal – The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- AL – Action Level – the concentrations of a contaminant, which, if exceeded, triggers, treatment or other requirements, which a water system must follow.
- TT – Treatment Technique – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
MICROBIOLOGICAL CONTAMINANTS						
Turbidity	No	.86		n/a	TT	Soil runoff
RADIOACTIVE CONTAMINANTS						
Alpha emitters	No	.9	pCi/l	0	15	Erosion of natural deposits
Combined radium	No	1.0	pCi/l	0	5	Erosion of natural deposits
INORGANIC CONTAMINANTS						
Barium	No	.134	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper	No	.360	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from woodpreservatives
Fluoride	No	.86	ppm	4	4	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Lead	No	.016	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate	No	.58	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
VOLATILE ORGANIC CONTAMINANTS						
THM (Total trihalomethanes)	No	4.14	ppb	0	80	By-product of drinking water chlorination
Total Organic Carbon (TOC)	No	1.37	ppb	n/a	TT	Naturally present in the environment
Chlorine	No	2.0	ppm	4	4	Water additive used to control microbes

Table of Primary Contaminants – At high levels some primary contaminants are known to pose a health risk to humans. This table provides a quick glance of any primary contaminant detections.

Contaminant	MCL	Amount Detected	Contaminant	MCL	Amount Detected
Bacteriological					
Total Coliform Bacteria	< 5 %	ND	Endothall	100 ppb	ND
Turbidity	TT	.86	Endrin	2 ppb	ND
Radiological					
Beta/Photon emitters (mrem/yr)	4	ND	Epicichlorohydrin	TT	ND
Alpha emitters (pCi/l)	15	.9	Glyphosate	700 ppb	ND
Combined radium (pCi/l)	5	1.0	Heptachlor	400 ppt	ND
Uranium	30 ppb	ND	Hexachlorobenzene	1 ppb	ND
Inorganic Chemicals					
Antimony	6 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Arsenic	10 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Asbestos (MFL)	7	ND	Hexachlorocyclopentadiene	200 ppt	ND
Barium	2 ppm	.134	Hexachlorocyclopentadiene	200 ppt	ND
Beryllium	4 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Cadmium	5 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Chromium	100 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Copper	AL=1.3 ppm	.36	Hexachlorocyclopentadiene	200 ppt	ND
Cyanide	200 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Fluoride	4 ppm	.86	Hexachlorocyclopentadiene	200 ppt	ND
Lead	AL=15 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Mercury	2 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Nitrate	10 ppm	.58	Hexachlorocyclopentadiene	200 ppt	ND
Nitrite	1 ppm	ND	Hexachlorocyclopentadiene	200 ppt	ND
Selenium	50 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Thallium	2 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Organic Chemicals					
2,4-D	70 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
2,4,5-TP(Silvex)	50 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Acrylamide	TT	ND	Hexachlorocyclopentadiene	200 ppt	ND
Alachlor	2 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Atrazine	3 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Benzo(a)pyrene [PAHs]	200 ppt	ND	Hexachlorocyclopentadiene	200 ppt	ND
Carbofuran	40 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Chlordane	2 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Dalapon	200 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Di (2-ethylhexyl)adipate	400 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Di (2-ethylhexyl) phthalates	6 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Dinoseb	7 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Diquat	20 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND
Dioxin [2,3,7,8-TCDD]	30 ppt	ND	Hexachlorocyclopentadiene	200 ppt	ND
Chk amines	4 ppm	ND	Hexachlorocyclopentadiene	200 ppt	ND
Chlorite	1 ppm	ND	Hexachlorocyclopentadiene	200 ppt	ND
HAA5	60 ppb	ND	Hexachlorocyclopentadiene	200 ppt	ND

The table below list the contaminants that are not regulated by the EPA or ADEM but are tested for in your drinking water. These contaminants pose many of the same health risk as the regulated contaminants but their presence in most drinking water is not frequent enough to warrant regulation. Unregulated contaminants are tested for to provide historical data on components presence in drinking water over time.

Test Results - Unregulated Contaminant Table

Monitoring Results in ppm

CONTAMINANT	Low Result	High Result	CONTAMINANT	Low Result	High Result	CONTAMINANT	Low Result	High Result
1,1 – Dichloropropene	ND	ND	Bromobenzene	ND	ND	Isopropylbenzene	ND	ND
1,1,1,2-Tetrachloroethane	ND	ND	Bromochloromethane	ND	ND	M-Dichlorobenzene	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	Bromodichloromethane	<1.0	1.17	Methomyl	ND	ND
1,1-Dichloroethane	ND	ND	Bromoform	ND	ND	MTBE	ND	ND
1,2,3 – Trichlorobenzene	ND	ND	Bromomethane	ND	ND	Metolachlor	ND	ND
1,2,3 – Trichloropropane	ND	ND	Butachlor	ND	ND	Metribuzin	ND	ND
1,2,4 – Trimethylbenzene	ND	ND	Carbaryl	ND	ND	N - Butylbenzene	ND	ND
1,3 – Dichloropropane	ND	ND	Chloroethane	ND	ND	Naphthalene	ND	ND
1,3 – Dichloropropene	ND	ND	Chloroform	<1.0	2.97	N-Propylbenzene	ND	ND
1,3,5 – Trimethylbenzene	ND	ND	Chloromethane	ND	ND	O-Chlorotoluene	ND	ND
2,2 – Dichloropropane	ND	ND	Dibromochloromethane	ND	ND	P-Chlorotoluene	ND	ND
3-Hydroxycarbofuran	ND	ND	Dibromomethane	ND	ND	P-Isopropyltoluene	ND	ND
Aldicarb	ND	ND	Dicamba	ND	ND	Propachlor	ND	ND
Aldicarb Sulfone	ND	ND	Dichlorodifluoromethane	ND	ND	Sec - Butylbenzene	ND	ND
Aldicarb Sulfoxide	ND	ND	Dieldrin	ND	ND	Tert - Butylbenzene	ND	ND
Aldrin	ND	ND	Hexachlorobutadiene	ND	ND	Trichlorofluoromethane	ND	ND

Third Unregulated Contaminant Monitoring (UCMR 3)

Monitoring Results in ppb

The third Unregulated Contaminant Rule (UCMR3) was initiated by EPA in 2012. UCMR3 requires the monitoring of two viruses and 28 unregulated chemical contaminants. These contaminants pose many of the same health risk as the regulated contaminants but their presence in most drinking water is not frequent enough to warrant regulation. Unregulated contaminants are tested for to provide historical data on components presence in drinking water over time.

CONTAMINANT	DETECTED	CONTAMINANT	DETECTED
1,2,3-trichloropropane	ND	cobalt	ND
1,3-butadiene	ND	strontium	61
chloromethane (methyl chloride)	ND	chromium ⁵	.5
1,1-dichloroethane	ND	chromium ⁶	0.53
bromomethane	ND	chlorate	43
chlorodifluoromethane (HCFC-22)	ND	perfluorooctanesulfonic acid (PFOS)	.05
bromochloromethane (Halon 1011)	ND	perfluorooctanoic acid (PFOA)	.04
1,4-dioxane	.25	perfluorononanoic acid (PFNA)	ND
vanadium	0.5	perfluorohexanesulfonic acid (PFHxS)	ND
molybdenum	ND	perfluorobutanesulfonic acid (PFBS)	ND
17-β-estradiol	ND	perfluoroheptanoic acid (PFHpA)	.01
17-α-ethynylestradiol	ND	estrone	ND
estriol	ND	testosterone	ND
equilin	ND	4-anadrostene-3,17 dione	ND
noroviruses	ND	enteroviruses	ND



Southside Water and Sewer Board

strives to provide a dependable and safe supply of water to all consumers.

As you can see by the table, our system had no violations of allowable limits of contaminants in your drinking water. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and radioactive material, and it can pick up substances resulting from the presence of animals or from human activity.

Southside Water Works and Sewer Board wants you to be aware that there is not a problem with lead in your drinking water. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Southside Water Works and Sewer Board is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a

person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Southside Water also tests for disinfection byproducts in your water, such as *trihalomethanes* and *haloacetic acids*. Disinfection byproducts are contaminants that develop when chlorine breaks down over an extended period of time. All test results were well within state and federal standards.

Based on a study conducted by ADEM with the approval of the EPA a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus monitoring for these contaminants is not required.

Southside Water Works and Sewer Board strives to provide a dependable and safe supply of water to all consumers. At times your water service may be interrupted due to the circumstances beyond our control and construction activity from the continuous growth. When these occurrences take place you may notice cloudy, dingy or even muddy looking water due to the disturbance in the lines. We apologize for these instances and try to flush our lines to prevent this from happening. Often consumers will install a low cost water filter in their line to help remove settleings in these instances.

**Southside Water Works and Sewer
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